



BR-500AC "Dräger approved" for Atlan Anesthesia Machines

Overview

Dräger has adopted the Silex Ethernet-to-Wi-Fi Bridge BR-500AC for its Atlan anesthesia machine family, enabling secure wireless connectivity and greater mobility in modern operating rooms.

The BR-500AC was selected to deliver reliable wireless data communication with 802.1X enterprise security and to decouple the development of the Wi-Fi interface from the medical device itself. A hospital deployment in Germany has successfully demonstrated the solution, allowing seamless mobility without permanent network wall cabling.

Modern Operating Rooms Demand Mobility

Today's acute care environments increasingly require flexibility. Anesthesia workstations must integrate seamlessly into hospital IT infrastructures while remaining easy to reposition as clinical workflows evolve. And as more devices are connected, the number of available LAN ports in medical facilities has become increasingly scarce. Responding directly to customer demand, Dräger initiated a project to enable wireless networking for its Atlan anesthesia machines, removing the dependency on fixed Ethernet cabling, and improving maneuverability within the operating room.

Although the Atlan series is natively equipped with Ethernet connectivity, enabling secure Wi-Fi communication in a strictly regulated medical environment presented a challenge. The solution needed to meet enterprise-grade security requirements, integrate smoothly into hospital networks, and be deployable without redesigning the medical device.



"With this wireless network enablement initiative, we wanted to answer our customers' need for adaptability to their existing network infrastructure without compromising on security. The Silex BR-500AC has proven to be the perfect missing link. It allows us to offer the Atlan anesthesia machine family with the wireless capabilities our customers expect, ensuring that our technology adapts to the hospital environment, not the other way around."

Anne-Sophie Herzet, Product Manager, Drägerwerk AG & Co. KGaA



Decoupling Wi-Fi Development from the Medical Device

Dräger defined clear and stringent requirements. The solution had to provide secure Wi-Fi connectivity for Ethernet-based Atlan machines while supporting enterprise authentication and protecting sensitive hospital data. At the same time, Dräger aimed to decouple the development of the Wi-Fi interface from the anesthesia machine itself, enabling faster implementation and easier lifecycle management.

In this context, the Silex BR-500AC emerged as the ideal solution. As a compact, reliable Ethernet-to-Wi-Fi bridge, it fulfills the rigorous security standards demanded by hospital IT departments and allows Atlan anesthesia machines to communicate wirelessly as if Wi-Fi were built in. The approach also offers scalability, as the same wireless bridge concept can be applied to additional medical devices across the portfolio.

Seamless Deployment in a German Hospital

Following selection and validation, the Atlan anesthesia machines equipped with the Silex BR-500AC were deployed at a hospital in Germany. The solution integrates seamlessly into the existing hospital network, providing stable, secure connectivity without the physical constraints of Ethernet wall cabling

For clinical staff, this translates into improved workflow efficiency, without changes to established IT security policies or device operation.

About the BR-500AC Wireless Bridge

The BR-500AC securely, reliably, and efficiently connects Ethernet-based devices to Wi-Fi networks. It is an 802.11ac Wave 2, 2×2 MU-MIMO Ethernet-to-Wi-Fi bridge supporting WPA3-Enterprise security. Designed for professional and regulated environments, the BR-500AC enables enterprise-grade wireless connectivity for devices that were originally designed for wired networks. The device can be powered using a conventional power cable or an optional Y-shaped USB power cable.



About the Silex Technology Europe

Silex Technology Europe, based in Willich, Germany, is the European subsidiary of Silex Technology, a Japan-based technology company with deep R&D expertise in device networking and wireless communications. Silex provides embedded wireless modules, connectivity solutions, and integration services tailored for medical, industrial, and commercial applications. With global engineering and support teams, Silex helps device manufacturers accelerate development, meet regulatory requirements, and deliver a "When It Absolutely Must Connect" wireless experience.

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